

PRELIMINARY NOTICE OF REJECTION OF THE IPO
(TRANSLATION)

Issuance Date: 2 February 2004

1. Applicant: Ammono SP. Z.O.O. and Nichia Corporation
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SUBJECT:

After examination, the IPO considers that the subject ROC (Taiwan) Patent Application No. 091110622 has the indefinite points as indicated in the following EXPLANATION (3). The applicant is required to file a response in duplicate by 1 April 2004 if any substantive counter-evidence or arguments are present. If the applicant fails to act according to the notice within the time limit, the IPO shall proceed with the examination on the basis of the materials on hand.

EXPLANATION:

- (1) If the applicant wishes to make amendments, the applicant should act according to the provisions of the Patent Law, Articles 44, 44-1, and 102-1, the Enforcement Rules of the Patent Law, Article 28, and the Announcement Jyh-Fa No. 0918600118-0 issued on 8 November 2002 by this Office, and a government fee of NT\$1,000 for amendment should be paid. (If the applicant makes supplements or amendments to the specification or drawings, a written application for such supplements or amendments in duplicate, a marked-up version of the amended specification or drawing pages in duplicate, and a non-marked-up, replacement version of the amended specification or drawing pages in triplicate shall be submitted. If the supplements or amendments render the page numbers of the original specification out of succession, the whole specification with the supplements or amendments in triplicate shall be submitted.)
- (2) If the applicant wishes to appear before the IPO for a face-to-face demonstration or explanation, please explicitly indicate "Interview Requested" in the response. The place and time for conducting an interview will be arranged if the IPO considers it necessary and a government fee of NT\$2,000 should be paid.
- (3) Upon examination, it is considered that:

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- (a) The subject invention is entitled "PROCESS AND APPARATUS FOR OBTAINING BULK MONO-CRYSTALLINE GALLIUM-CONTAINING NITRIDE." The applicant made amendments in November 2002. Upon examination, it is found that the amendments do not change the substance of the invention. The subject application is examined on the basis of the amended claims and documents on file.
- (b) The subject invention discloses a method for preparing a gallium-containing nitride crystal comprising a step of bringing a gallium-containing feedstock into a supercritical state in the presence of an alkali-metal containing component and a nitrogen-containing solvent, a dissolution step at a first temperature and pressure, and a crystallization step at a second temperature and pressure, to obtain a monocrystalline gallium nitride.
- (c) Upon examination, it is found that Journal of Physics Condensed Matter, (v 13, n 32, Aug 13, 2001, pp 6875-6892) and MRS Internet J. Nitride Semicond. Res. (v 3, A 25, 1998) have disclosed a process for the growth of bulk gallium nitride from a gallium solution under high pressure. The subject application should concretely describe the technical features and contents of the subject invention and explicates the differences between the subject invention and the above prior art references, to clearly show the novelty and the inventive step of the subject invention.
- (d) Claims 1, 31, 52, 76, 77, 83, 85, and 86, directed to processes, do not concretely set forth the essential conditions such as temperature and pressure, for practicing the invention. The scope of the above claims is overly broad and ambiguous and exceeds that supported by the working examples.
- (e) Claims 36, 37, 38, and 94, referring to a crystal or a substrate, are overly ambiguous in description, and cannot concretely define the differences between the subject invention and the prior art reference, e.g., Physica Status Solidi (a) Applied Research, v 180, n 1, 2000, pp 51-58.
- (f) Enclosed is a copy each of the above citations.

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經濟部智慧財產局專利申請案核駁理由先行通知書

受文者：艾蒙諾公司、日亞化學工業股份有限公司（代理人：陳長文先生）

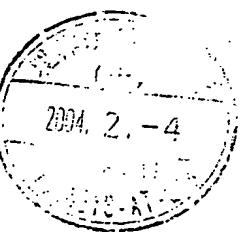
地址：臺北市松山區敦化北路二〇一號七樓

發文日期：中華民國九十三年二月二日

發文文號：（九三）智專二（六）01103字
第09320091460號

4.1

(5.28)



主旨：第091110622號專利申請案經審查後發現尚有如說明三所述不明確之處，台端（貴公司）若有具體反證資料或說明，請於文到次日起六十日內提出申復說明及有關反證資料一式二份。若屆期未依通知內容辦理者，專利專責機關得依現有資料續行審查，請查照。

說明：

- 一、本案如有修正應依專利法第四十四條、第四十四條之一、第一百零二條之一、專利法施行細則第二十八條及本局九十一年十一月八日智法字第0911860011810號公告之規定辦理並繳修正規費新台幣一千元正（如有補充、修正說明書或圖式者，應備具補充、修正申請書一式二份，並檢送補充、修正部份劃線之說明書或圖式修正頁一式二份及補充、修正後無劃線之說明書或圖式替換頁一式三份；如補充、修正後致原說明書或圖式頁數不連續者，應檢附補充、修正後之全份說明書或圖式一式三份至局）。
- 二、若希望來局當面示範或說明，請於申復說明書內註明「申請面詢」，本局認為有必要時，另安排地點、時間舉辦「面詢」，並繳交規費新台幣二千元正。
- 三、本案經審查認為：
- （一）本案為「獲得含鎵氮化物之整體單結晶體之方法及裝置」，申請人於九十一年十一月十五

審查委員會

訂

線

日提出修正，經查該修正並未變更實質，本案依所提修正本及卷存資料逕行審查，合先敘明。

(二) 本案揭示一種製備含鎵氮化物晶體的方法，係使含鎵原料於含鹼金屬成分及含氮溶劑中進入超臨界狀態，經第一溫度、壓力之溶解步驟及經第二溫度、壓力之結晶化步驟，以獲得單晶性之鎵氮化物。

(三) 經檢索公開資料Journal of Physics Condensed Matter (v 13, n 32, Aug 13, 2001, p 6875-6892) 及MRS Internet J. Nitride Semicond. Res. (v 3, A 25, 1998)已揭示一種自鎵溶液中高壓成長整體鎵氮化物之方法，本案應具體敘明技術特徵內容並申復說明與上述前案之差異，以明確揭示本案新穎性、進步性。

(四) 申請專利範圍第1、31、52、76、77、83、85、86項所請方法未具體載明實施之必要條件，如溫度、壓力範圍等，所請範圍過廣且籠統，已超出說明書實施例所能支持者。

(五) 申請專利範圍第36、37、38、94之晶體、基材所述過於籠統，無法具體界定與習知之差異(如Physica status solidi (a) Applied Research(v180, n1, 2000, p51-58))，一併指明。

(六) 檢附前述引證資料影本。

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